

ABSTRACT

A mobile station apparatus enabling increases in communication system capacity when uplink high-speed packet communication is performed and the like. The mobile station having a plurality of antennas, antenna 1 and antenna 2, compares the reception power of a signal r_{21} received in antenna 1 with the reception power of a signal r_{22} received in antenna 2 among signals transmitted from base station 2 of an adjacent cell, selects antenna 1 as a transmission antenna when "the reception power of r_{21} < the reception power of r_{22} ", while selecting antenna 2 as a transmission antenna when "the reception power of r_{21} \geq the reception power of r_{22} ", transmits an uplink signal to base station 1 from the selected antenna, and reduces interference caused in base station 2 of the adjacent cell.